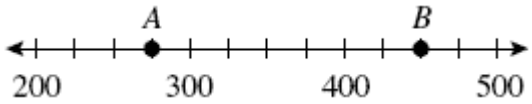
Geometry and Measurement Review

Name _____ HR _____

Math 6 White Section B C E F

Date _____

1. Which of the following is closest to the distance between point *A* and point *B* on the number line shown below?



A. 175 units

B. 275 units

C. 450 units

D. 725 units

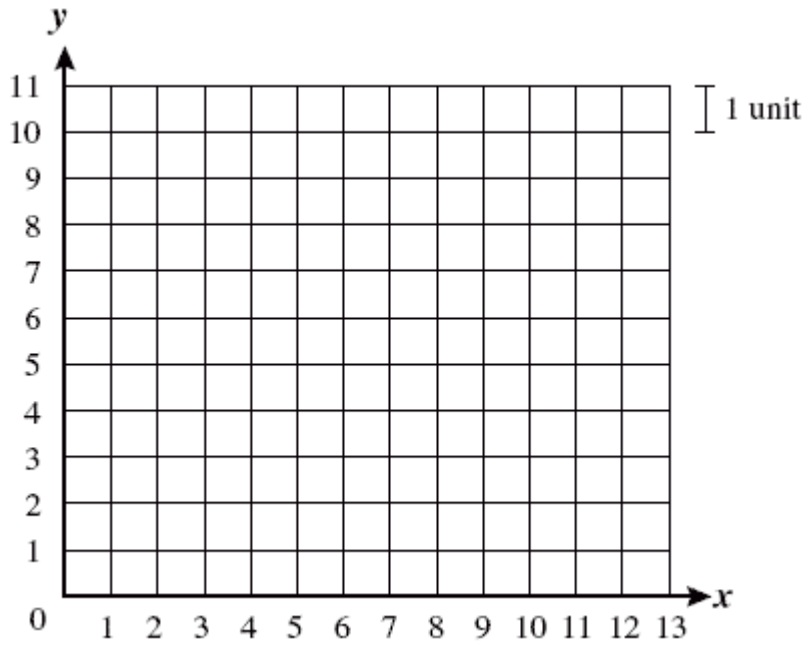
2. Mr. Donato drew an equilateral triangle. Which of the following statements is true about the triangle?

A. At least one angle is obtuse.

B. All of the angles are acute.

C. At least one angle measures 90 degrees.

D. All of the angles have different measurements.

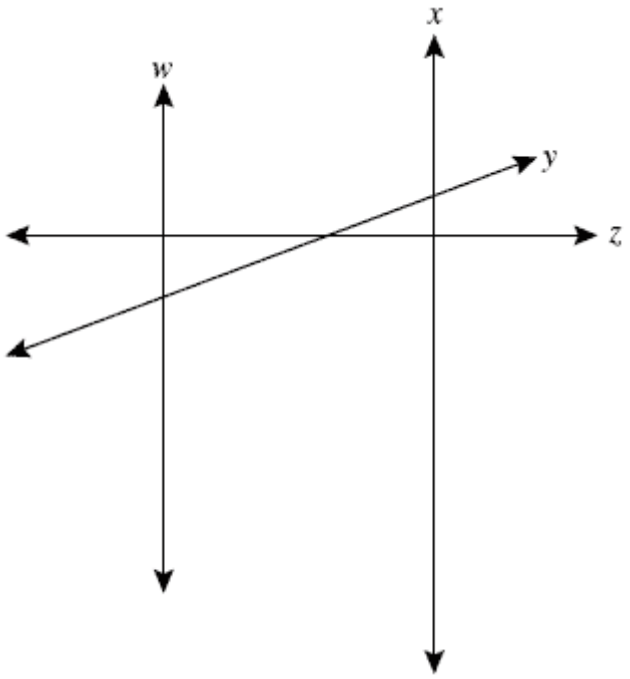


a. On your coordinate grid, plot the point (4, 3). Label the point *A*.
b. On your coordinate grid, plot the point (4, 9). Label the point *B*.
c. The points *A* and *B* will be used to form a triangle.
   - On your coordinate grid, plot and label a third point, *C*, so that a right isosceles triangle will be formed when points *A*, *B*, and *C* are connected.
   - What are the coordinates of point *C*?
   - Explain how you know that the triangle formed is **both** right and isosceles.
d. What is the area, in square units, of triangle *ABC*? Show or explain how you got your answer.

4. A rectangle has a width of 6 feet, as shown below.

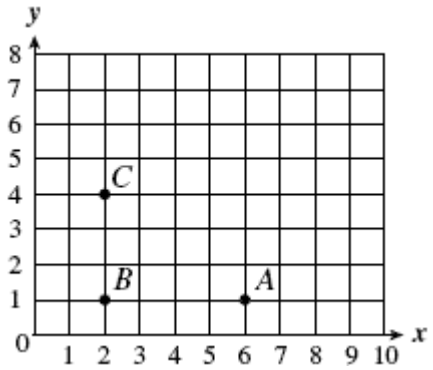
The perimeter of the rectangle is 34 feet. What is the length, in feet, of the rectangle?

5. Lines *w*, *x*, *y*, and *z* are shown below.



What are 2 lines that appear to be perpendicular to each other?

6. Julian is drawing a rectangle on the coordinate grid below. Each vertex of his rectangle will have whole number coordinates. Vertices *A*, *B*, and *C* of the rectangle are shown on the grid.



A. (4, 6)

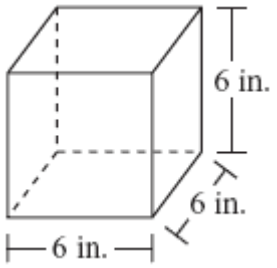
B. (5, 5)

C. (6, 4)

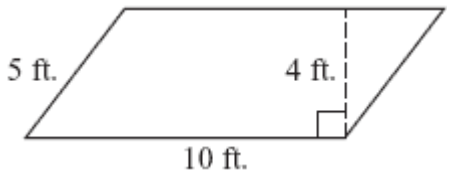
D. (6, 5)

Julian will graph the point *D* to complete the rectangle. What are the coordinates of point *D*?

7. What is the volume, in cubic inches, of the cube below?



8. A parallelogram has the dimensions shown below.



What is the area of the parallelogram?

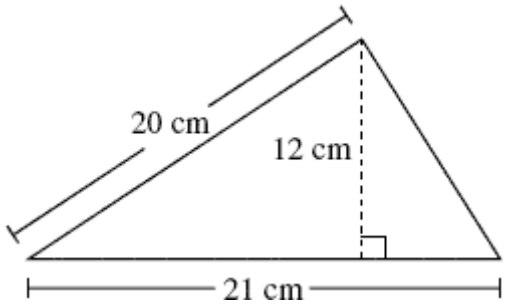
A. 100 sq. ft.

B. 50 sq. ft.

C. 40 sq. ft.

D. 30 sq. ft.

9. What is the area of the triangle shown below?



A. 126 cm^2

B. 210 cm^2

C. 252 cm^2

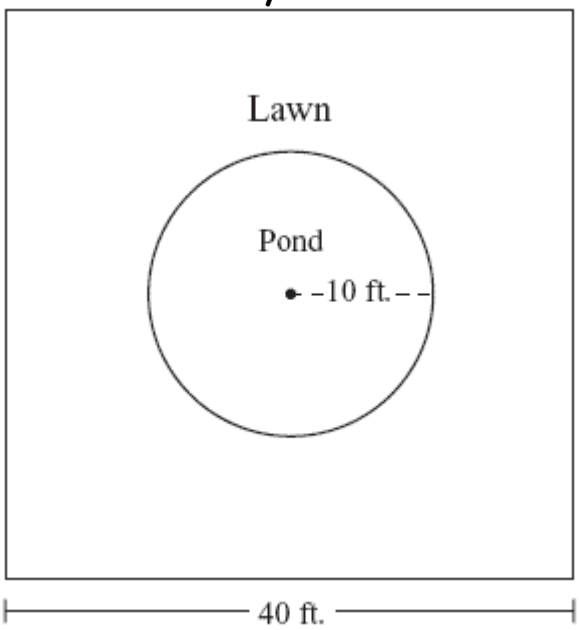
D. 420 cm^2

10. A city park is in the shape of a square, with each side measuring 40 feet.

a. What is the area, in square feet, of the city park? Show or explain how you got your answer.

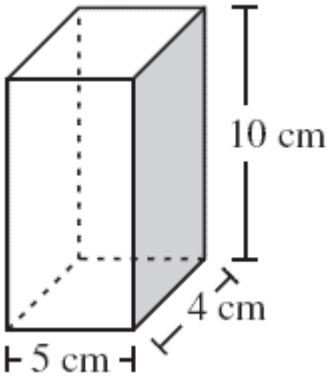
The city has decided to put a pond in the shape of a circle in the center of the park. The circle will have a radius of 10 feet, as shown in the diagram below. The remaining portion of the park will be a lawn.

City Park



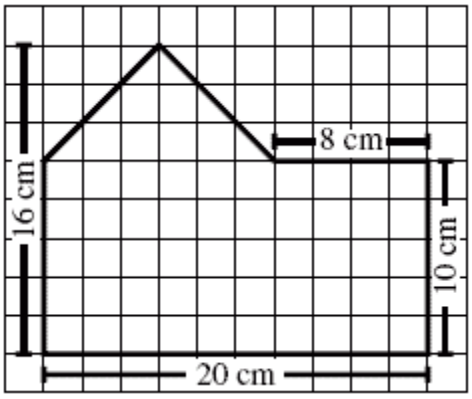
b. What is the approximate area, in square feet, of the circle? Show your work. (Use 3.14 for π.)
c. A landscaper plans to fertilize the lawn of the park. What is the approximate area, in square feet, of the lawn of the park? Show or explain how you got your answer.
d. One bag of GrowFast fertilizer can fertilize 50 square feet. How many bags of GrowFast will the landscaper need in order to fertilize the lawn of the park? Show or explain how you got your answer.

Mattias has a rectangular prism with the dimensions shown below.



a. What is the area, in square centimeters, of the shaded face of the rectangular prism? Show or explain how you got your answer.
b. What is the volume, in cubic centimeters, of the rectangular prism? Show or explain how you got your answer.
c. What is the total surface area, in square centimeters, of the rectangular prism? Show or explain how you got your answer.

12. Mariatu drew the figure shown on the grid below.



What is the area of the entire figure?

A. 320 cm^2

B. 236 cm^2

C. 200 cm^2

D. 72 cm^2